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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,734	08/02/2001	Jean-Louis Delevallee	VMF-493-A	7828

7590

09/17/2002

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EXAMINER

MULLINS, BURTON S

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 09/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,734

Applicant(s)

DELEVALLEE, JEAN-LOUIS

Examiner

Burton S. Mullins

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed August 2, 2001 has been considered.

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "charcoal" (claim 30) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Specification

4. The preliminary amendment and substitute specification filed August 2, 2001 have been entered.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 16-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In all of claims 16-31, the construction "characterized in that..." is clumsy, vague syntax and should be changed.

In claim 16, recitation "first and second radial ends" is not clear. How are the ends of the coil "radial ends" when they are located axially from each other? Recitation "two parts directly mounted on each other" is vague. Should this be ---two parts directly mounted to each other---? Recitation "the frame is sealed" is vague. Does this mean the housing is sealed from the outside? Recitation "two components transversally assembled one on each other" is indefinite and vague. Does this mean that the components are assembled such that one is transverse the other? If so, how can this be since the two end parts are located axially with respect to one another?

In claim 17, "end walls enveloping nearer the ends of the coil" is vague and indefinite.

In claim 18, "centrally bowl shaped" is vague and indefinite.

In claim 20, insert "and" after ---aluminum,---.

In claim 22, recitation "one of the two pieces of the frame being made up of one piece with at least one part of a piece of a gear box casing of an actuator to which the motor

corresponds" is vague, indefinite and confusing. Does this mean that one of the pieces comprises a portion of gear box casing of an actuator driven by the motor?

In claim 23, "its exterior elements" is vague, indefinite and lacks antecedent basis. Recitation "that contributes to the increase of the thermal changes with the ambient air" is vague, non-idiomatic and indefinite. What is an "increase of the thermal change"?

In claim 27, "an assembly flange of pieces between them" is vague and indefinite.

In claim 28, "characterized by at least one of the flanges is interrupted by...a fixation lug" is improper grammar and indefinite. Does this mean the lug is sandwiched between the flanges?

In claim 29, "closing plate" is vague. What does the adjective "closing" mean? What is the "other piece...attached" to?

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 16-21, 26, 29 and 31, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vacha (US 2,598,623). Vacha teaches an electric motor including a rotor 32 provided with a coil (coils 1-11 in Figs.10-13) having first and second radial ends (not numbered, see Fig.1) and mounted in a hollow frame formed of outer shell 81 having end

walls 16 and 17 (Figs.1&6); the parts made of heat conducting material (the end walls 16 and 17 are "castings" of a metal, i.e., heat conducting material; c.3, lines 9-10); the frame carrying induction means (stator 33 with poles 36-39; Fig.6); characterized in that the frame is sealed (the end walls/castings 16/17 together with shell 81 enclose the rotor; Figs.1&6), and the two parts are two components 16/17 transversally assembled one on each other, and the end wall of each part is continuously adjacent to one of the first and second ends of the coil (Fig.1).

Vacha differs in that the hollow frame does not comprise two parts directly mounted on each other, but rather three parts (shell 81 and end walls/castings 16 and 17) directly mounted on each other.

However, to integrate previously separate elements such as the shell 81 with an end wall/casting 17 and thus form a frame comprising two parts would have been obvious to one having ordinary skill since integration of parts has been held to involve ordinary skill. In re Larson, 144 USPQ 347 (CCPA 1965).

Regarding claims 17-18, changes in shape to the enveloping portion of the end walls/castings in Vacha would have been obvious since shape changes have been held to involve ordinary skill. In re Dailey, 149 USPQ (CCPA 1976).

Regarding claims 19-21 and 31, though Vacha does not explicitly state the material of the end walls/castings, choice of a preferred material/s on the basis of its suitability for the intended use has been held to be within the general skill of a worker in the art. In re Leshin, 125 USPQ.

Regarding claim 26, both end walls 16/17 include axially and radially-facing portions.

9. Claims 23-25, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vacha as applied to claim 16 above, and further in view of Onjanow (US 3,610,975). Vacha does not teach cooling means on the end walls.

Onjanow teaches cooling fins on end brackets 18/19 of an enclosed motor (Figs.1&3). The fins improve heat transfer (c.1, lines 40-65).

It would have been obvious to provide cooling fins per Onjanow on the exterior of the end walls of Vacha since these would have been desirable for heat transfer.

Regarding claim 25, note fixation lugs 91 in Vacha.

10. Claims 27-28, as best understood, are rejected under 35 U.S.C. 103(a) as being unpatentable over Vacha as applied to claim 16 above, and further in view of Yabushita (US 5,514,922). Vacha does not teach a flange on the housing pieces.

Yabushita teaches a hermetically sealed motor including housing pieces 111-113 (Fig.1; c.4, lines 25-26). The pieces are secured by flanges comprising annular projections 15a/16a formed at respective outer peripheries of the opening end surfaces of the pieces (c.5, lines 49-66). This forms a joint whereby the housing pieces are connected to each other in a sealed manner (c.5, lines 63-66).

It would have been obvious to employ the flange connection of Yabushita to connect the housing parts of Vacha since such a connection would have been desirable to seal the housing pieces together.


Allowable Subject Matter

11. Claims 22 and 30 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The prior art does not teach that one of the two pieces comprises a part of a gear box casing of an actuator. Neither does the prior art teach or suggest a plate carrying charcoal placed on the frame interior on the end wall of one of the two pieces.

Conclusion

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Burton S. Mullins whose telephone number is 305-7063. The examiner can normally be reached on Monday-Friday, 9 am to 5 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are 305-1341 for regular communications and 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-0956.


Burton S. Mullins
Primary Examiner
Art Unit 2834

bsm
September 14, 2002